

2000-264337A

**\* NOTICES \***

JPO and NCIP are not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.

2. \*\*\*\* shows the word which can not be translated.

3. In the drawings, any words are not translated.

---

**CLAIMS**

---

[Claim(s)]

[Claim 1] The goods conveyance storage equipment which possesses a connection means connect the two stanchions concerned, respectively, and the positioning means for positioning the goods laid in said pallet to this pallet possible [ adjustment of spacing between the pallet with which goods are laid, two or more stanchions attached in this pallet removable so that the goods laid in this pallet may be surrounded, and two stanchions which adjoin each other mutually ].

[Claim 2] The goods conveyance storage equipment which possesses a connection means connect the two stanchions concerned, respectively, and the fixed means for demounting the goods laid in said pallet to this pallet, and fixing possible possible [ adjustment of spacing between the pallet with which goods are laid, two or more stanchions attached in this pallet removable so that the goods laid in this pallet may be surrounded, and two stanchions which adjoin each other mutually ].

[Claim 3] The pallet with which goods are laid, and two or more stanchions attached in this pallet removable so that the goods laid in this pallet may be surrounded, A connection means to connect the two stanchions concerned possible [ adjustment of spacing between two stanchions which adjoin each other mutually ], respectively, Goods conveyance storage equipment possessing the positioning means for positioning the goods laid in said pallet to this pallet, and the fixed means for demounting the goods laid in said pallet to this pallet, and fixing possible.

[Claim 4] Goods conveyance storage equipment according to claim 1 or 3 currently fixed to the attachment member by which it has a gage pin for said positioning means to position the goods laid in the pallet to this pallet, and this gage pin is attached in a

pallet.

[Claim 5] Goods conveyance storage equipment according to claim 2 or 3 currently fixed to the attachment member by which it has a holddown member for said fixed means to fix the goods laid in the pallet to a pallet, and this holddown member is attached in a pallet.

[Claim 6] Goods conveyance storage equipment according to claim 4 or 5 with which said attachment member is attached possible [ justification ] to a pallet.

[Claim 7] Goods conveyance storage equipment according to claim 1 to 6 which prepared the marker who becomes the criteria of the installation location of goods over said pallet in the pallet.

[Claim 8] The goods conveyance storage equipment with which a connection means connect the two stanchions concerned, respectively provides possible [ adjustment of spacing between the pallet with which goods are laid, two or more stanchions attached in this pallet removable so that the goods laid in this pallet may be surrounded, and two stanchions which adjoin each other mutually ], and said pallet is characterized by to have a pallet body and the plinth member which are fixed possible [ justification ] to this pallet body.

[Claim 9] Goods conveyance storage equipment according to claim 8 which prepared the marker who becomes the positioning criteria when fixing said plinth member to a pallet body in the pallet body.

[Claim 10] It is goods conveyance storage equipment according to claim 1 to 9 constituted so that all spacing between two stanchions have four stanchions are attached removable [ on this pallet ] in the condition of having started almost perpendicularly to the goods installation side of said pallet, and said connection means adjoins each other mutually, and are located may change at same rate, and the spacing concerned may be interlocked mutually and it may adjust.

[Claim 11] It has four stanchions attached in this pallet removable in the condition of having started almost perpendicularly to the goods installation side of said pallet. Said connection means So that each other may be adjoined mutually, and spacing and two stanchions between two located stanchions may be countered and spacing between two stanchions of the others which adjoin each other mutually and are located may change at same rate Goods conveyance storage equipment according to claim 1 to 9 constituted so that it may interlock mutually and the spacing concerned may be adjusted.

[Claim 12] It has four stanchions attached in this pallet removable in the condition of having started almost perpendicularly to the goods installation side of said pallet. Said

connection means The 1st and 2nd joints attached in each strut along with the longitudinal direction, respectively, Where it provided the 1st and 2nd connection members which adjoin each other mutually and connect two located stanchions mutually, respectively and four stanchions are attached in said pallet Where it was located caudad and said four stanchions are attached in said pallet rather than the 1st joint, said 2nd joint said 1st and 2nd connection members while crossing mutually, respectively and being located -- every -- the 1st connection member It connects with the 1st joint attached in one stanchion of the two stanchions with which the longitudinal direction end side adjoins each other mutually, and is located rotatable. and it connects with the 2nd joint attached in the stanchion of another side of the two stanchions with which the longitudinal direction other end side adjoins each other mutually, and is located rotatable -- having -- every -- the 2nd connection member The longitudinal direction end side is connected with the 1st joint attached in the stanchion of said another side rotatable. And the longitudinal direction other end side is connected with one [ said ] stanchion rotatable at the 2nd joint of attachment \*\*\*\*, and at least one side of said 1st and 2nd joints receives these attached each struts. Goods conveyance storage equipment according to claim 1 to 10 attached to the longitudinal direction movable.

[Claim 13] It has the 1st thru/or the 4th stanchion attached in this pallet removable in the condition of having started almost perpendicularly to the goods installation side of said pallet. Said connection means The 1st thru/or the 3rd joint attached in the 1st thru/or the 4th each strut along with the longitudinal direction, respectively, The 1st and 2nd stanchions, the 2nd and 3rd stanchions which adjoin each other mutually and are located, Where it provided the 1st and 2nd connection members which connect each of the 4th and 1st stanchions with the 3rd and 4th stanchions and a list mutually and four stanchions are attached in a pallet Where said 2nd and 3rd joints were caudad located rather than the 1st joint, and the 2nd joint was caudad located rather than the 3rd joint and said the 1st thru/or 4th stanchion is attached in said pallet said every -- the 1st and 2nd connection members, while being located in the condition of having crossed mutually, respectively The 1st and the 2nd connection member which adjoined each other mutually and were prepared between the 1st [ which is located ] and 2nd stanchions, Each longitudinal direction end side of the 1st [ which was prepared between the 3rd / which counters these 1st and 2nd stanchions, and is located /, and 4th stanchions ], and 2nd connection members It connects with the 1st joint attached in the 1st and 2nd stanchion and 3rd and 4th stanchions, respectively rotatable, respectively. And that each longitudinal direction other end side is

connected with the 2nd joint attached in the 1st and 2nd stanchion and 3rd and 4th stanchions, respectively rotatable, respectively. The 1st and the 2nd connection member which adjoined each other mutually and were prepared between the 2nd [ which is located ] and 3rd stanchions, Each longitudinal direction end side of the 1st [ which was prepared between the 4th / which counters these 2nd and 3rd stanchions, and is located /, and 1st stanchions ], and 2nd connection members It connects with the 1st joint attached in the 2nd and 3rd stanchion and 4th and 1st stanchions, respectively rotatable, respectively. And that each longitudinal direction other end side is connected with the 3rd joint attached in the 2nd and 3rd stanchion and 4th and 1st stanchions, respectively rotatable, respectively. Goods conveyance storage equipment given in either [ claim 1 by which the 2nd and 3rd joints are attached at least to the longitudinal direction movable to these attached each struts thru/or ] 9 and 11 either [ of said the 1st thru/or 3rd joint ].

[Claim 14] Goods carried by the goods conveyance storage equipment according to claim 1 to 13 which has at least one side of a goods side positioning means to collaborate with said positioning means and to position the goods to a pallet, and the goods side fixed means which collaborates with said fixed means and fixes the goods to a pallet.

[Claim 15] Goods according to claim 14 which consist of the foot of the goods lower part which can engage with the engagement section from which said goods side positioning means constitutes the positioning means formed in said pallet.

[Claim 16] the foot in at least 2 models of industrial products which said goods are industrial products and are mutually different which corresponds mutually -- the goods according to claim 15 with which spacing of a between is almost respectively equal.

[Claim 17] Goods according to claim 14 which said goods side fixed means is in the body of goods, and are arranged inside [ which was attached in opening of this body of goods possible / closing motion ] covering.

[Claim 18] Goods according to claim 14 with which said goods side positioning means consists of the hole used also for applications other than positioning of the goods to a pallet.

[Claim 19] Goods according to claim 14 or 17 with which said goods side fixed means consists of the hole used also for applications other than immobilization of the goods to a pallet.

## DETAILED DESCRIPTION

---

### [Detailed Description of the Invention]

[0001]

[Field of the Invention] This invention relates to the goods carried by the goods conveyance storage equipment used in order to carry industrial products, such as an electric product, the component of those, a building material, furniture, or other various goods or to keep this, and its equipment.

[0002]

[Description of the Prior Art] The equipment constituted as this kind of goods conveyance storage equipment by the pallet which lays goods, four stanchions attached in the condition of having started in the four corners of this pallet perpendicularly to that goods installation side, and the connection member which carries out the fixed coupling of between [ which adjoin each other mutually ] stanchions is used widely. In order to carry goods with this goods conveyance storage equipment, goods are held in the space inside four stanchions, this is laid on a pallet, and the goods are carried the whole goods conveyance storage equipment. Moreover, when keeping in a warehouse etc. the goods held in goods conveyance storage equipment, two or more goods conveyance storage equipments can be accumulated up and down, and the tooth space in a warehouse can be utilized effectively.

[0003] However, the volume of conventional goods conveyance storage equipment mentioned above of the space in which goods are held is fixed to carrying with this kind of goods conveyance storage equipment, or there being goods which should be kept from the thing of large size to the thing of small size. For this reason, although this can be carried or kept about the goods of the size corresponding to this with the goods conveyance storage equipment of a certain specific magnitude, rather than the goods hold space of that goods conveyance storage equipment, about the goods of large size, this cannot be carried or it cannot be kept. Moreover, if goods extremely smaller than goods hold space were carried with the goods conveyance storage equipment or were kept, the efficiency of materials handling will fall, moreover the tooth space in a warehouse will be used vainly, and it is not desirable.

[0004]

[Problem(s) to be Solved by the Invention] The place which this invention is made that the conventional fault mentioned above should be removed, and is made into the purpose is to offer the goods carried by the goods conveyance storage equipment which can carry goods efficiently or can keep this, and its goods conveyance storage

equipment.

[0005]

[Means for Solving the Problem] The pallet with which goods are laid in order that this invention may attain the above-mentioned purpose, Two or more stanchions attached in this pallet removable so that the goods laid in this pallet may be surrounded, The goods conveyance storage equipment which possesses a connection means to connect the two stanchions concerned, respectively, and the positioning means for positioning the goods laid in said pallet to this pallet possible [ adjustment of spacing between two stanchions which adjoin each other mutually ] is proposed (claim 1).

[0006] The pallet with which goods are similarly laid in order that this invention may attain the above-mentioned purpose, Two or more stanchions attached in this pallet removable so that the goods laid in this pallet may be surrounded, The goods conveyance storage equipment which possesses a connection means to connect the two stanchions concerned, respectively, and the fixed means for demounting the goods laid in said pallet to this pallet, and fixing possible possible [ adjustment of spacing between two stanchions which adjoin each other mutually ] is proposed (claim 2).

[0007] The pallet with which goods are similarly laid in order that this invention may attain the above-mentioned purpose, Two or more stanchions attached in this pallet removable so that the goods laid in this pallet may be surrounded, A connection means to connect the two stanchions concerned possible [ adjustment of spacing between two stanchions which adjoin each other mutually ], respectively, The goods conveyance storage equipment possessing the positioning means for positioning the goods laid in said pallet to this pallet and the fixed means for demounting the goods laid in said pallet to this pallet, and fixing possible is proposed (claim 3).

[0008] Moreover, it is advantageous, if it has a gage pin for positioning the goods with which said positioning means was laid in above-mentioned claim 1 or 3 by the pallet in the goods conveyance storage equipment of a publication to this pallet and is fixed to the attachment member by which this gage pin is attached in a pallet (claim 4).

[0009] Furthermore, it is advantageous, if it has a holddown member for said fixed means to fix the goods laid on the pallet to a pallet in above-mentioned claim 2 or goods conveyance storage equipment given in 3 and is fixed to the attachment member by which this holddown member is attached in a pallet (claim 5).

[0010] Moreover, it is advantageous if said attachment member is attached in above-mentioned claim 4 or 5 possible [ justification ] to a pallet in the goods conveyance storage equipment of a publication (claim 6).

[0011] Moreover, in above-mentioned claim 1 thru/or goods conveyance storage equipment given in either of 6, if the marker who becomes the criteria of the installation location of goods over said pallet is prepared in a pallet, it is advantageous (claim 7).

[0012] Furthermore, the pallet with which goods are laid in order that this invention may attain the above-mentioned purpose, Two or more stanchions attached in this pallet removable so that the goods laid in this pallet may be surrounded, A connection means to connect the two stanchions concerned, respectively is provided possible [ adjustment of spacing between two stanchions which adjoin each other mutually ]. Said pallet A pallet body, The goods conveyance storage equipment characterized by having the plinth member fixed possible [ justification ] to this pallet body is proposed (claim 8).

[0013] In that case, if the marker who becomes the positioning criteria when fixing said plinth member to above-mentioned claim 8 to a pallet body in the goods conveyance storage equipment of a publication is prepared in a pallet body, it is advantageous (claim 9).

[0014] In moreover, the condition of having started to above-mentioned claim 1 thru/or either of 9 almost perpendicularly to the goods installation side of said pallet in the goods conveyance storage equipment of a publication It is advantageous, if it is constituted so that it may have four stanchions attached in this pallet removable, and all spacing between two stanchions which said connection means adjoins each other mutually, and are located may change at same rate, it may interlock mutually and the spacing concerned may be adjusted (claim 10).

[0015] In furthermore, the condition of having started to above-mentioned claim 1 thru/or either of 9 almost perpendicularly to the goods installation side of said pallet in the goods conveyance storage equipment of a publication It has four stanchions attached in this pallet removable. Said connection means It is advantageous, if it is constituted so that each other may be adjoined mutually, and spacing and two stanchions between two located stanchions may be countered, and spacing between two stanchions of the others which adjoin each other mutually and are located may change at same rate, it may interlock mutually and the spacing concerned may be adjusted (claim 11).

[0016] In moreover, the condition of having started to above-mentioned claim 1 thru/or either of 10 almost perpendicularly to the goods installation side of said pallet in the goods conveyance storage equipment of a publication It has four stanchions attached in this pallet removable. Said connection means The 1st and 2nd joints

attached in each strut along with the longitudinal direction, respectively, Where it provided the 1st and 2nd connection members which adjoin each other mutually and connect two located stanchions mutually, respectively and four stanchions are attached in said pallet Where it was located caudad and said four stanchions are attached in said pallet rather than the 1st joint, said 2nd joint said 1st and 2nd connection members while crossing mutually, respectively and being located -- every -- the 1st connection member It connects with the 1st joint attached in one stanchion of the two stanchions with which the longitudinal direction end side adjoins each other mutually, and is located rotatable. and it connects with the 2nd joint attached in the stanchion of another side of the two stanchions with which the longitudinal direction other end side adjoins each other mutually, and is located rotatable -- having -- every -- the 2nd connection member The longitudinal direction end side is connected with the 1st joint attached in the stanchion of said another side rotatable. and advantageous (claim 12), if the longitudinal direction other end side is connected rotatable at the 2nd joint of attachment \*\*\*\* at one [ said ] stanchion and at least one side of said 1st and 2nd joints is attached to the longitudinal direction movable to these attached each struts.

[0017] In furthermore, the condition of having started almost perpendicularly to the goods installation side of said pallet in the goods conveyance storage equipment of a publication to either [ above-mentioned claim 1 thru/or ] 9 and 11 It has the 1st thru/or the 4th stanchion attached in this pallet removable. Said connection means The 1st thru/or the 3rd joint attached in the 1st thru/or the 4th each strut along with the longitudinal direction, respectively, The 1st and 2nd stanchions, the 2nd and 3rd stanchions which adjoin each other mutually and are located, Where it provided the 1st and 2nd connection members which connect each of the 4th and 1st stanchions with the 3rd and 4th stanchions and a list mutually and four stanchions are attached in a pallet Where said 2nd and 3rd joints were caudad located rather than the 1st joint, and the 2nd joint was caudad located rather than the 3rd joint and said the 1st thru/or 4th stanchion is attached in said pallet said every -- the 1st and 2nd connection members, while being located in the condition of having crossed mutually, respectively The 1st and the 2nd connection member which adjoined each other mutually and were prepared between the 1st [ which is located ] and 2nd stanchions, Each longitudinal direction end side of the 1st [ which was prepared between the 3rd / which counters these 1st and 2nd stanchions, and is located /, and 4th stanchions ], and 2nd connection members It connects with the 1st joint attached in the 1st and 2nd stanchion and 3rd and 4th stanchions, respectively rotatable, respectively. And that



each longitudinal direction other end side is connected with the 2nd joint attached in the 1st and 2nd stanchion and 3rd and 4th stanchions, respectively rotatable, respectively. The 1st and the 2nd connection member which adjoined each other mutually and were prepared between the 2nd [ which is located ] and 3rd stanchions, Each longitudinal direction end side of the 1st [ which was prepared between the 4th / which counters these 2nd and 3rd stanchions, and is located /, and 1st stanchions ], and 2nd connection members It connects with the 1st joint attached in the 2nd and 3rd stanchion and 4th and 1st stanchions, respectively rotatable, respectively. And that each longitudinal direction other end side is connected with the 3rd joint attached in the 2nd and 3rd stanchion and 4th and 1st stanchions, respectively rotatable, respectively. At least, if the 2nd and 3rd joints are attached to the longitudinal direction movable to these attached each struts inside it is said the 1st thru/or 3rd joint, they are advantageous (claim 13).

[0018] Moreover, this invention proposes the goods carried by the goods conveyance storage equipment according to claim 1 to 13 which has at least one side of a goods side positioning means to collaborate with said positioning means and to position the goods to a pallet, and the goods side fixed means which collaborates with said fixed means and fixes the goods to a pallet in order to attain said purpose (claim 14).

[0019] In that case, if it consists of the foot of the goods lower part which can engage with the engagement section which constitutes a positioning means by which said goods side positioning means was formed in above-mentioned claim 14 in the goods of a publication at said pallet, it is advantageous (claim 15).

[0020] moreover, the foot in at least 2 models of industrial products which the goods are industrial products and are mutually different in the goods of a publication in above-mentioned claim 15 which corresponds mutually -- advantageous (claim 16), if spacing of a between is almost respectively equal.

[0021] Furthermore, it is advantageous if arranged inside covering with which said goods side fixed means is in the body of goods, and was attached in above-mentioned claim 14 possible [ closing motion ] in the goods of a publication at opening of this body of goods (claim 17).

[0022] Moreover, in goods given in above-mentioned claim 14, if said goods side positioning means consists of the hole used also for applications other than positioning of the goods to a pallet, it is advantageous (claim 18).

[0023] Furthermore, in above-mentioned claim 14 or goods given in 17, if said goods side fixed means consists of the hole used also for applications other than immobilization of the goods to a pallet, it is advantageous (claim 19).

[0024]

[Embodiment of the Invention] Hereafter, the example of an operation gestalt of this invention is explained to a detail according to a drawing.

[0025] Drawing 1 is the perspective view showing an example of the goods conveyance storage equipment concerning this invention, and the goods conveyance storage equipment shown here possesses the pallet 2 with which the goods 1 which consist of a copying machine are laid. This pallet 2 has the two legs 4 which consist of the centrum material prolonged in parallel mutually, two plinth members 3 fixed to each leg 4 where that biped section 4 is built, and two reinforcement member 3A similarly fixed to the biped section 4, and the top face of that plinth member 3 is the goods installation side 5 on which goods 1 are put. Although this pallet 2 consists of metal plates, such as steel, it can also constitute a pallet with the ingredient which is the rigidity of wood or hard resin and which becomes size. Although the plinth member 3 and reinforcement member 3A, and the leg 4 may be fixed with welding, adhesives, etc., it is also fixable with \*\*\*\* which is not illustrated so that these can be decomposed easily. Moreover, the pallet which fixes the adequate several leg to the inferior surface of tongue of the rectangular Taira plate, and grows into it, and the pallet of other gestalten can also be used, and the pallet of various gestalten other than the pallet whose flat-surface gestalt is a square can also be used further.

[0026] The goods 1 carried on the goods installation side 5 of a pallet 2 are positioned to a pallet 2 by positioning means to mention later, by fixed means to mention later similarly, are demounted on a pallet 2 and fixed possible.

[0027] Moreover, goods conveyance storage equipment has four stanchions in the example shown in two or more stanchions and drawing 1 , and as shown in drawing 2 , these stanchions 6 are in the condition which started in the four corners of a pallet 2 almost perpendicularly to the goods installation side 5 of the pallet 2 concerned, and are attached in this pallet 2 removable. When a square is supposed on a pallet 2, each strut 6 is set up by the pallet part of each corner section of the square removable, respectively. Although a stanchion 6 is constituted by a metal, resin, or wood, as each strut 6 also shows drawing 3 and drawing 4 , it consists of a metal hollow pipe in the illustrated example. Moreover, the projected part 7 which consists of the pin fixed to the leg 4 or reinforcement member 3A protrudes on the near four corners of the goods installation side 5 of a pallet 2, and the lower part of each strut 6 is attached in them at each of that projected part 7. Thus, two or more stanchions 6 are attached in a pallet 2 removable so that the goods 1 laid in the goods installation side 5 of a pallet 2 may be surrounded. Each strut 6 of this example is attached so that it can detach

and attach easily by manual operation to a pallet 2.

[0028] Moreover, goods conveyance storage equipment possesses a connection means to connect the two stanchions, respectively, possible [ adjustment of spacing between two stanchions which adjoin each other mutually ]. The connection means of this example has the connection member of 1st and 2nd joint [ which were attached in each strut 6 along with the longitudinal direction, respectively ] 8 and 9, and pair which connects mutually two stanchions 6 which adjoin each other mutually and are located, respectively, i.e., the 1st, and 2nd connection member 14 and 15. every -- the 1st and 2nd connection members 14 and 15 connect two stanchions 6 attached by adjoining each other mutually, respectively in each side of a pallet 2, i.e., the 1st which intersect perpendicularly mutually, and the 4th side 10, 11, 12, and 13, respectively. Moreover, it is in the condition that the 2nd joint 9 was located more nearly caudad than the 1st joint 8 where four stanchions 6 are attached in a pallet 2 so that drawing 2 may also show, and four stanchions 6 were similarly attached in the pallet 2, the connection members 14 and 15 of each other [ respectively and ] of the 1st and \*\* a 2nd are crossed, and it is located.

[0029] The 1st and 2nd joints 8 and 9 consisted of the tube-like object which fabricated a metal, synthetic resin, or rubber as shown in drawing 3 and drawing 4 , and each strut 6 has fitted into the feed hole 27,127. Moreover, every two tongue-shaped pieces 16 and 18 protrude on these joints 8 and 9, and each edge of the 1st and 2nd connection members 14 and 15 is connected with each of those tongue-shaped pieces 16 and 18 rotatable through pins 17 and 19, respectively. the 1st and 2nd connection members 14 and 15 consist of the rigid bodies, such as wood, rigid resin, or a metal, and are cylindrical -- it is -- carrying out -- it is formed in thin tabular ones.

[0030] When there is the need of identifying four stanchions 6 mentioned above here As shown in drawing 1 , these, respectively The 1st stanchion 6A, the 2nd stanchion 6B, 3rd stanchion 6C and 4th stanchion 6D are called, the sign of 8A, 9A;8B, and 9B;8C and 9C;8D and 9D is similarly given to each 1st and 2nd joints 8 and 9 attached in each strut 6A thru/or 6D, respectively, and these are identified. Similarly The 1st and 2nd stanchions 6A and 6B, the 2nd and 3rd stanchions 6B and 6C, The sign of 14A, 15A;14B, and 15B;14C and 15C;14D and 15D is given to the 1st and 2nd connection members which connect mutually each of the 3rd and 4th stanchions 6C and 6D and the 4th and 1st stanchions 6D and 6A, respectively, and these are identified. This presupposes that it is the same also in the example of an operation gestalt mentioned later.

[0031] The 1st and 2nd connection members 14 and 15 are connected free [ rocking ]

as follows to the joint.

[0032] Namely, the 1st and 2nd stanchion 6A attached by adjoining each other mutually in the 1st side 10 of a pallet 2 and 1st connection member 14A prepared among 6B so that drawing 1 and drawing 2 may show It connects with 1st joint 8A attached in 1st stanchion 6A the longitudinal direction end side of whose is one stanchion rotatable through the above-mentioned pin. And the longitudinal direction other end side It connects with 2nd joint 9B attached in 2nd stanchion 6B which is the stanchion of another side rotatable through the pin. Moreover, the 1st and 2nd stanchion 6A and 2nd connection member 15A prepared among 6B It connects with 2nd joint 9A which the longitudinal direction end side was connected with 1st joint 8B attached in 2nd stanchion 6B which is the stanchion of another side rotatable through the pin, and was attached in 1st stanchion 6A the longitudinal direction other end side of whose is one stanchion rotatable through the pin. The 1st and the 2nd connection member 14B and 15B which were prepared between the 2nd stanchion 6B attached by these relation adjoining each other mutually in the 2nd side 11 of the next door of the 1st side 10 of a pallet 2, and 3rd stanchion 6C, The 1st and the 2nd connection member 14C and 15C which were prepared between the 3rd attached by adjoining each other mutually in the 3rd side 12 of the next door of the 2nd side 11 and 4th stanchion 6C, and 6D, Also in the 1st and 2nd connection members 14D and 15D prepared between the 4th furthermore attached by adjoining each other mutually in the 4th side 13 of the next door of the 3rd side 12 and 1st stanchion 6D, and 6A, it is completely the same.

[0033] Thus, it sets to the goods conveyance storage equipment shown in drawing 1 thru/or drawing 4 . The 1st connection member 14 is connected with the 1st joint 8 attached in one stanchion 6 of the two stanchions 6 with which the longitudinal direction end side adjoins each other mutually, and is located in each sides 10, 11, 12, and 13 of a pallet 2 rotatable. every -- and it connects with the 2nd joint 9 attached in the stanchion 6 of another side of the two stanchions 6 with which the longitudinal direction other end side adjoins each other mutually, and is located rotatable -- having -- every -- the 2nd connection member 15 the longitudinal direction end side is connected with the 1st joint 8 attached in the stanchion 6 of above-mentioned another side rotatable, and the longitudinal direction other end side is connected with one above-mentioned stanchion 6 rotatable at the 2nd joint 9 of attachment \*\*\*\*. Thus, each strut 6 achieves the function as a stanchion supporting the 1st and 2nd connection members 14 and 15.

[0034] Moreover, the 1st and 2nd joints 8 and 9 connected with each of the 1st and

2nd connection members 14 and 15 like \*\*\*\* are attached movable so that at least one of these can move to the longitudinal direction freely to these attached each struts 6. In the illustrated example, each 2nd joint 9 is located in the lower part of each strut 6, as shown in drawing 4 , it \*\*\*\*s, it was fixed to each strut 6 by 20 or welding, respectively, and, moreover, each 1st joint 8 has fitted into the longitudinal direction free [ sliding ] to each strut 6 by it. The 1st joint 8 may be fixed to a stanchion 6, and the 2nd joint 9 may be fitted in free [ sliding ] to a stanchion 6, or you may fit in the 1st and 2nd joints 8 and 9 free [ sliding ] to both the stanchions 6.

[0035] The thing of the various sizes corresponding to the magnitude of the goods 1 which should carry the pallet 2 shown in drawing 1 is prepared beforehand. When carrying goods 1, the pallet 2 suitable for the magnitude of the goods 1 is chosen, and goods 1 are carried on the goods installation side 5 of the top face. Although the spacing D1 and D2 between that projected part 7 differs according to the size of the selected pallet 2 at this time, spacing between the stanchions 6 before attaching in a pallet 2 can be freely adjusted as follows so that it may agree at those spacing D1 and D2.

[0036] Namely, if it presses to the sense estranged mutually as 6C and 6D are indicated to be two stanchions 6A and 6B in the stanchion 6 before attaching in a pallet 2 which adjoin each other mutually to drawing 1 by the arrow head A Each 1st joint 8 slides caudad to each strut 6, and spacing between the 1st and 2nd stanchions 6A and 6B and spacing between the 3rd and 4th stanchions 6C and 6D can extend. At this time, as an arrow head B shows the 1st and 4th stanchions 6A and 6D and the 2nd and 3rd stanchions 6B and 6C to coincidence, it moves to the sense estranged mutually, and spacing between these stanchions can also be extended.

[0037] On the contrary, if each strut 6 is pressurized at an arrow-heads A and B and opposite side, since each 1st joint 8 will move up along with a stanchion 6, spacing between the stanchions which adjoin each other mutually is narrowed. Thus, in the example shown in drawing 1 , each of that spacing interlocks mutually and is adjusted so that spacing between two stanchions attached by adjoining each other mutually each sides 10, 11, 12, and 13 of a pallet 2 may change at same rate. That is, an above-mentioned connection means to connect two stanchions, respectively is constituted so that it may change at same rate, and it may interlock mutually and all spacing between two stanchions which adjoin each other mutually and are located may adjust the spacing concerned.

[0038] After adjusting spacing between the adjacent each struts 6 according to the spacing D1 and D2 between the projected parts 7 of the pallet 2 chosen as mentioned

above, the lower part of each strut 6 is attached in each projected part 7 of the pallet 2 with which goods 1 were laid. Each strut 6 may be attached in a pallet 2 removable by constituting so that four stanchions 6 may be attached in the four corners of a pallet 2 removable, and forming a mounting hole in the four corners of a pallet, and attaching the lower part of each strut in each of that mounting hole by attaching in each projected part 7 the feed hole of each 2nd joint 9 fixed to the lower part of each strut 6 in that case.

[0039] As mentioned above, the stanchion 6 which adjusted spacing to any of the pallet 2 can be attached by preparing two or more pallets 2 with which the spacing D1 and D2 between projected parts 7 differs.

[0040] moreover, although you may change the 1st and 2nd connection members 14 and 15 into a free condition, without connecting mutually, in the illustrated example The pars intermedia of the 1st [ which made the pair mutually ], and 2nd connection members 14 and 15 by the \*\* pin 21 When it is connected so that it can rotate freely mutually, and this adjusts spacing between each struts 6, the 1st and 2nd connection members 14 and 15 can be operated smoothly, and spacing tuning between each struts can be performed smoothly. This is the same also in the example of an operation gestalt explained later.

[0041] Although spacing tuning between the stanchions which mentioned above the 1st and 2nd joints 8 and 9 even if it fitted into the longitudinal direction possible [ sliding ] to both each struts 6 can be performed If the 2nd joint 9 is fixed to a stanchion 6 like the example shown in one of the joints, for example, drawing 1 , and the joint 8 of another side is attached possible [ sliding ] to a stanchion 6 The 1st and 2nd connection members 14 and 15 can be smoothly operated at the time of the spacing tuning between stanchions, and it becomes possible to do the activity comfortably.

[0042] By attaching a stanchion 6 to a pallet 2 as mentioned above, the goods conveyance storage equipment 30 assembled as shown in drawing 2 can be constituted. At this time, the goods 1 (not shown in drawing 2 ) carried on the goods installation side 5 are held in the hold space surrounded by four stanchions 6 and the 1st and 2nd connection members 14 and 15, the fork of the fork lift truck which is in this condition, for example, is not illustrated is inserted in the pallet 2 bottom, by raising a fork, goods conveyance storage equipment 30 is lifted and goods 1 can be carried. Moreover, goods [ having carried goods 1 ] conveyance storage equipment can be moved to a truck, a vessel, or a railroad vehicle, and this can be conveyed. Moreover, the goods 1 held in goods conveyance storage equipment 30 can also be

kept in a warehouse etc. Thus, since goods 1 are enclosed by the 1st and 2nd connection members 14 and 15 in the four way type when carrying goods 1 or keeping this, the goods 1 can be protected. If four stanchions 6 are demounted from a pallet 2, goods 1 can be easily taken down from on a pallet 2.

[0043] On the other hand, as the pallet 2 has the connection section by which the upper part of other goods conveyance storage equipments is connected with the rear-face side of the opposite side removable in the goods installation side 5 and fractures and shows a part of leg 4 in the example shown in drawing 1 , the connection section which changes from the engagement hole 22 to four places of each leg 4 of a pallet 2 is formed.

[0044] By this configuration, as shown in drawing 2 , the goods conveyance storage equipment carrying goods (not shown in drawing 2 ) can be accumulated, where more than one are stabilized up and down. That is, as shown in drawing 1 , the goods conveyance storage equipment 30 is laid in a warehouse, as it fits in possible [ desorption ] and the cap 23 with which the tip sharpened is shown in the upper part of each strut 6 of goods conveyance storage equipment at drawing 2 . And other goods conveyance storage equipment 30A constituted completely as well as the goods conveyance storage equipment 30 concerned is raised and laid above the goods conveyance storage equipment 30 by the fork lift truck. At this time, the cap 23 ( drawing 1 ) attached in the upper part of four stanchions 6 of downward goods conveyance storage equipment 30 is attached in the engagement hole 22 ( drawing 1 ) formed in the pallet of upper goods conveyance storage equipment 30A, respectively. Thereby, two or more goods conveyance storage equipments 30 and 30A can be positioned up and down, and each other can be accumulated, and goods 1 can be kept, using the tooth space in a warehouse effectively. Moreover, where two or more goods conveyance storage equipments are piled up up and down, these are also carriable together.

[0045] The cap 23 attached in the upper part of each strut 6 may not be carried out that it is easy to make each strut 6 engage with the engagement hole 22, and without using this cap 23, soon, the tip of each strut 6 may be constituted so that it may engage with the engagement hole 22. If the tip of each strut 6 is formed in a tapered form like cap 23 in that case, each strut 6 can be made to engage with the engagement hole 22 easily.

[0046] Moreover, if each strut 6 is brought close to the sense which approaches mutually, the 1st and 2nd connection members 14 and 15 will be folded, these whole can be folded up in a compact, as shown in drawing 5 , at the time of un-using [ of

goods conveyance storage equipment ] it, four stanchions 6 can be sampled from the pallet 2, and this can be stored in a very small tooth space. Thus, two or more stanchions 6 and the connection members 14 and 15 which constitute the above-mentioned connection means constitute the foldable stanchion unit 32, where two or more of the stanchions 6 are removed from a pallet 2.

[0047] On the other hand, the pallet 2 which had the stanchion 6 removed is storable in piles up and down, as shown in drawing 6 . At this time, by fitting into the engagement hole 22 ( drawing 1 ) of that upper pallet 2 the projected part 7 which protruded on the pallet 2, respectively, correctly, each pallet 2 can be positioned up and down, and can be accumulated. thus, the stanchion unit 32 and a pallet 2 can be used repeatedly, and it must discard at a conveyance place like the goods conveyance storage equipment which consists of conventional corrugated paper etc. -- a thing can be lost or it can lessen.

[0048] As mentioned above, according to the goods conveyance storage equipment shown in drawing 1 thru/or drawing 6 , it carries, or substantially [ the magnitude of the goods 1 which should be kept ], when choose the pallet 2 according to this at any times, they are made to correspond to the spacing D1 and D2 of the projected part 7 and adjust spacing of a stanchion 6, the goods can be carried easily or it can be kept.

[0049] The goods conveyance storage equipment of the example of an operation gestalt shown in drawing 7 thru/or drawing 12 also possesses a connection means connect the two stanchions concerned, respectively, possible [ adjustment of spacing between the pallet 2 with which the goods 1 (refer to drawing 8 and drawing 12 ), such as a copying machine, are laid, two or more stanchions 6 attached in this pallet 2 removable so that the goods with which it was laid in the goods installation side 5 of the pallet 2 may be surrounded, and two stanchions which adjoin each other mutually ]. Also in this example, when it has the 1st thru/or 4th four stanchions 6A, 6B, 6C, and 6D attached in this pallet 2 removable and a square is supposed on a pallet 2 in the condition of having started in the four corners of a pallet 2 almost perpendicularly to the goods installation side 5 of the pallet 2 concerned, each strut 6 is set up by each corner section of that square removable, respectively. Also in the example of drawing 7 , by fitting the lower part of each strut 6 which consists of a hollow pipe into each projected part 7 which protruded on the four corners of a pallet 2, it is constituted so that each strut 6 can be easily attached or demounted on a pallet 2 by manual operation. Moreover, there are no pallet 2 and change which showed the configuration of the pallet 2 shown in drawing 7 to drawing 1 .

[0050] In the example shown in drawing 7 , a connection means to connect two



stanchion 6 comrades, respectively has the 1st and 2nd connection members 14 and 15 and the 3rd joint 26 other than the 1st and 2nd joints 8 and 9. Also about this 3rd joint 26, Signs 26A, 26B, 26C, and 26D are attached to each joint of that, and that each is identified. Hereafter, the detail of the connection means is clarified.

[0051] As mentioned above, the connection means of the goods conveyance storage equipment shown in drawing 7 It has the 1st thru/or the 3rd joint 8, 9, and 26 attached in the 1st 4th each strut 6A thru/or 6D along with the longitudinal direction, respectively. And when a stanchion 6 is attached in a pallet 2 like the connection means of the goods conveyance storage equipment of drawing 1 , The 1st and 2nd stanchions 6A and 6B which adjoin each other mutually and are located in each side 10 of the pallet 2 thru/or 13, The 2nd and 3rd stanchionsB [ 6 ] and 6C, 3rd and 4th stanchionsC [ 6 ] and 6D and connection member of pair which connects mutually each of 4th and 1st stanchionsD [ 6 ] and 6A with list, i.e., the 1st, and 2nd connection member 14 and 15 is provided.

[0052] Where four stanchions 6 are attached in a pallet 2, moreover, the 2nd and 3rd joints 9 and 26 It is in the condition that it was caudad located rather than the 1st joint 8, and the 2nd joint 9 was caudad located rather than the 3rd joint 26, and the 1st 4th stanchion 6A thru/or 6D were attached in the pallet 2. a pair each of connection members, i.e., every, — the 1st and 2nd connection members 14 and 15 are located in the condition of having crossed mutually, respectively.

[0053] furthermore, every — longitudinal direction each edge of the 1st and the 2nd connection member 14 and 15 is freely connected with each joint free [ rocking ] as follows through the pin like the case where it is shown in drawing 3 and drawing 4 .

[0054] Where the 1st 4th stanchion 6A thru/or 6D are attached in a pallet 2 In the 1st side 10 of a pallet 2, adjoin each other mutually, and each longitudinal direction end side of the 1st [ which was prepared between the 1st and 2nd located stanchion 6A and 6B ] and 2nd connection members 14A and 15A It connects with the 1st joint 8A and 8B attached in the 1st and 2nd stanchions 6A and 6B, respectively rotatable, respectively, and that each longitudinal direction other end side is connected with the 2nd joint 9B and 9A attached in the 2nd and 1st stanchions 6B and 6A, respectively rotatable, respectively.

[0055] Similarly, in the 2nd side 11 of the next door of the 1st side 10 of a pallet 2, adjoin each other mutually, and each longitudinal direction end side of the 1st [ which was prepared between the 2nd and 3rd located stanchion 6B and 6C ] and 2nd connection members 14B and 15B It connects with the 1st joint 8B and 8C attached in the 2nd and 3rd stanchions 6B and 6C, respectively rotatable, respectively, and that

each longitudinal direction other end side is connected with the 3rd joint 26C and 26B attached in the 3rd and 2nd stanchions 6C and 6B, respectively rotatable, respectively.

[0056] In the 3rd side 12 of the next door of the 2nd side 11 of a pallet 2, adjoin each other mutually, and furthermore, each longitudinal direction end side of the 1st [ which was prepared between the 3rd located and 4th stanchion 6C, and 6D ] and 2nd connection members 14C and 15C It connects with the 1st joint 8C and 8D attached in the 3rd and 4th stanchions 6C and 6D, respectively rotatable, respectively, and that each longitudinal direction other end side is connected with the 2nd joint 9D and 9C attached in the 4th and 3rd stanchions 6D and 6C, respectively rotatable, respectively.

[0057] In the 4th side 13 of the next door of the 3rd side 12 of a pallet 2, adjoin each other mutually, and moreover, each longitudinal direction end side of the 1st [ which was prepared between the 4th located and 1st stanchion 6D, and 6A ] and 2nd connection members 14D and 15D It connects with the 1st joint 8D and 8A attached in the 4th and 1st stanchions 6D and 6A, respectively rotatable, respectively, and that each longitudinal direction other end side is connected with the 3rd joint 26A and 26D attached in the 1st and 4th stanchions 6A and 6D, respectively rotatable, respectively.

[0058] As mentioned above, the 1st and the 2nd connection member which adjoined each other mutually and were prepared between the 1st [ which is located ] and 2nd stanchions, Each longitudinal direction end side of the 1st [ which was prepared between the 3rd / which counters the 1st and 2nd stanchions, and is located /, and 4th stanchions ], and 2nd connection members It connects with the 1st joint attached in the 1st and 2nd stanchion and 3rd and 4th stanchions, respectively rotatable, respectively. And that each longitudinal direction other end side is connected with the 2nd joint attached in the 1st and 2nd stanchion and 3rd and 4th stanchions, respectively rotatable, respectively. Moreover, the 1st and the 2nd connection member which adjoined each other mutually and were prepared between the 2nd [ which is located ] and 3rd stanchions, Each longitudinal direction end side of the 1st [ which was prepared between the 4th / which counters the 2nd and 3rd stanchions, and is located /, and 1st stanchions ], and 2nd connection members It connects with the 1st joint attached in the 2nd and 3rd stanchion and 4th and 1st stanchions, respectively rotatable, respectively, and that each longitudinal direction other end side is connected with the 3rd joint attached in the 2nd and 3rd stanchion and 4th and 1st stanchions, respectively rotatable, respectively.

[0059] Like \*\*\*, inside it is the 1st thru/or the 3rd joint 8, 9, and 26 connected with each of the 1st and 2nd connection members 14 and 15, the 2nd and 3rd joints 9 and

26 at least are attached movable to these attached each struts 6, so that it can move to the longitudinal direction freely. In the illustrated example, each 1st joint 8 located in the upper part of each strut 6 pressed fit or \*\*\*\*ed to each strut 6, for example, or was fixed to it by welding etc., and the 2nd and 3rd joints 9 and 26 have fitted into the longitudinal direction free [ sliding ] to a stanchion 6. You may make it also attach the 1st joint 8 in the longitudinal direction free [ sliding ] to each strut 6 in which this was attached.

[0060] Also when carrying goods with the goods conveyance storage equipment shown in drawing 7 , as the pallet 2 suitable for the magnitude of the goods is chosen and it is shown in drawing 12 , the goods 1 are positioned on a pallet 2, or it demounts, and fixes possible so that goods 1 may be laid and it may mention later on the pallet 2. Spacing between each struts 6 before attaching in a pallet 2 is adjusted as follows so that the spacing D1 and D2 between the projected parts 7 of the selected pallet 2 may be suited on the other hand.

[0061] Namely, it presses in the direction which shows the 1st and 2nd two stanchions 6A and 6B attached in each of the 1st side 10 of a pallet 2, and the 3rd side 12 which counters this by adjoining each other mutually, and two stanchions, the 3rd and the 4th, 6C and 6D to drawing 7 by the arrow head A, or the direction contrary to this. Then, the 2nd joint 9 attached in these stanchions slides on the upper part or a lower part along with each strut 6. Spacing between two stanchions, the 1st and the 2nd, 6A and 6B, and other 3rd [ the ] and spacing between the 4th two stanchions 6C and 6D change with these at same rate. In this example, 2nd stanchion 6B, spacing of 3rd stanchion 6C, and 4th stanchion 6D and spacing of 1st stanchion 6A do not change only by adjusting spacing of stanchion 6A, 6B;6C, and 6D in that case.

[0062] When adjusting these spacing, it presses in the direction which shows the 2nd and 3rd stanchions 6B and 6C and the 4th and 1st stanchions 6D and 6A to drawing 7 by the arrow head B, or the direction contrary to this. The 3rd joint 26 which fitted into each strut moves to the upper and lower sides or a lower part along with each strut 6, and spacing between the 2nd and 3rd stanchions 6B and 6C and spacing between the 4th and 1st stanchions 6D and 6A change with these at same rate.

[0063] As mentioned above, it sets to the goods conveyance storage equipment of this example. So that spacing between two stanchions attached in each of one side which counters one side and this of a pallet 2 by adjoining each other may change at same rate The spacing interlocks mutually and is adjusted, and the spacing interlocks mutually and is adjusted so that spacing between two stanchions attached in other each of two sides which a pallet 2 moreover counters mutually by adjoining each other

mutually may change at same rate. That is, it is constituted so that an above-mentioned connection means to connect two stanchions, respectively may counter spacing and two stanchions 6 between two stanchions 6 which adjoin each other mutually and are located, and spacing between two stanchions 6 of the others which adjoin each other mutually and are located may change at same rate, it may interlock mutually and the spacing concerned may be adjusted. Thereby, it can adjust much more more freely than the case of the example which showed adjustment of spacing between each struts to drawing 1 . The stanchion 6 which adjusted spacing is attached in the pallet 2 on which goods 1 were put as mentioned above.

[0064] Thus, the stanchion 6 after spacing adjustment can be attached in any of the pallet 2 by preparing beforehand the pallet 2 which has the spacing D1 and D2 between the projected parts 7 which can attach the stanchion 6 with which spacing is adjusted.

[0065] The goods carried on the goods installation side 5 of a pallet 2 can be carried completely like the case of the example of an operation gestalt explained previously as mentioned above, or this can be kept. Moreover, the goods conveyance storage equipment shown in drawing 7 can also accumulate up and down, as shown in drawing 8 , and it fits into each of four engagement holes 22 ( drawing 7 ) formed in the rear-face side of the opposite side in that case through the cap (not shown) in which the upper part of each strut 6 of lower goods conveyance storage equipment 30 was attached by direct or this in the goods installation side 5 of the pallet 2 of upper goods conveyance storage equipment 30A. At this time, as shown in drawing 8 , the pallet 2 of upper goods conveyance storage equipment 30A can also be constituted so that it may support with the 1st joint 8 of lower goods conveyance storage equipment 30. Thus, the goods conveyance storage equipments 30 and 30A can be accumulated up and down, and goods can be kept or carried to a small tooth space. By demounting four stanchions 6 from a pallet 2, the goods on a pallet 2 can be comfortably taken down to a floor line etc.

[0066] And if a stanchion 6 is extracted from a pallet 2, the stanchion 6, 1st, and 2nd connection members 14 and 15 are foldable in the goods conveyance storage equipment shown in drawing 7 as well as the goods conveyance storage equipment shown in drawing 1 , in a compact, as shown in drawing 9 . That is, also in the goods conveyance storage equipment shown in drawing 7 , two or more stanchions 6 and the connection members 14 and 15 which constitute the above-mentioned connection means constitute foldable stanchion unit 32A, where the stanchion 6 is removed from a pallet 2.

[0067] When folding up stanchion unit 32A, to drawing 10 , as the chain line shows, a stanchion 6 can be held by hand, and as a stanchion 6 is brought close and it is shown in drawing 11 , the stanchion unit 32A can be folded up. The stanchion unit 32 shown in drawing 1 is foldable similarly. In addition, it is the tongue-shaped piece for connecting the connection members 14 and 15 with each joint 8 which is shown in drawing 10 and drawing 11 by sign 18A, and these are equivalent to each tongue-shaped piece 16 shown in drawing 3 .

[0068] Moreover, drawing 7 carries goods on a pallet 2, fixes the goods to a pallet 2 removable, subsequently lowers stanchion unit 32A from the upper part of a pallet 2, and fits the lower part of a stanchion 6 into the projected part 7 of a pallet 2. The goods conveyance storage equipment shown in drawing 1 thru/or drawing 6 can also detach [ that stanchion unit 32A is attached in a pallet 2, or the situation when raising that stanchion unit 32A up, and removing from a pallet 2 is shown, and ] and attach the stanchion unit 32 on a pallet 2 by this approach.

[0069] On the other hand, drawing 12 makes the 3rd joint 26 of stanchion unit 32A shown in drawing 7 slide up. The 1st and the 2nd connection member 14B and 15B, The 1st and 2nd connection members 14D and 15D which counter this are raised up. The 2nd joint 9 is made to slide caudad, other 1st [ the ], and the 2nd connection member 14A and 15A and each of 14C and 15C are folded up, the stanchion unit 32A is moved horizontally, and the operation which attaches or demounts this stanchion unit 32A on a pallet 2 is shown. Since it is not necessary to move stanchion unit 32A up and down, and according to this approach that activity can be done very comfortably, a stanchion 6 is moreover greatly separated from goods 1 and that stanchion unit 32A is moved horizontally Anchoring and removal of stanchion unit 32A to a pallet 2 can be performed, and an activity can be carried out, without attaching a blemish to goods 1, without contacting a stanchion 6 and the 1st and 2nd connection members 14 and 15 on goods.

[0070] It can put, as by from now on demounting stanchion unit 32A also showed the pallet 2 shown in drawing 7 to drawing 6 . Moreover, also in above-mentioned goods conveyance storage equipment, in the goods installation side 5, since the pallet 2 has the connection section by which the upper part of other goods conveyance storage equipments is connected with the opposite side removable, it can accumulate easily two or more goods conveyance storage equipments up and down.

[0071] As mentioned above, although each example of an operation gestalt about the basic configuration of goods conveyance storage equipment was explained, if the goods 1 will shift greatly and will move to a pallet 2 in case goods are carried and

carried on the pallet 2 of this goods conveyance storage equipment or this is kept, by the stable state, can carry goods 1 or they cannot be kept.

[0072] Then, the goods conveyance storage equipment previously explained in relation to drawing 1 thru/or drawing 12 possesses at least one side of the positioning means for positioning the goods laid in the pallet 2 to this pallet 2, and the fixed means for demounting the goods similarly laid in the pallet 2 to this pallet 2, and fixing possible. here, positioning goods 1 to a pallet 2 with the above-mentioned positioning means When a pallet 2 is placed on a horizontal plane and goods 1 are laid in the pallet 2, Although the goods 1 concerned shift substantially horizontally and do not move to a pallet 2, if goods 1 are lifted up It means positioning and stopping goods 1 to a pallet 2 so that the goods 1 can be removed from a pallet 2. With the above-mentioned fixed means It means fixing goods 1 to a pallet 2 so that the goods which laid goods 1 on the pallet 2 as fixing to a pallet 2 may horizontal shift substantially also up and may not move to a pallet 2. Below, the example of a concrete configuration of this positioning means and a fixed means is clarified.

[0073] Drawing 13 shows an example of an above-mentioned positioning means, and the positioning means illustrated here is constituted by the four engagement sections which consist of the through tube 33 formed in the plinth member 3 of a pallet 2. On the other hand, when a copying machine is laid in a floor line etc., four feet 43 in contact with the floor line are formed in the bottom plate 34 of the copying machine which is an example of goods 1. the time of carrying goods 1 on the goods installation side 5 of a pallet 2 -- each -- four through tubes 33 formed in the pallet 2 boil a foot 43, respectively, and it fits in. Thereby, goods 1 are correctly positioned to a pallet 2, and can prevent the fault by which the goods 1 shift greatly horizontally and run to a pallet 2 during conveyance of goods. the engagement section which consists of a concave instead of a through tube 33 -- a pallet 2 -- forming -- this -- the foot 43 of goods 1 -- respectively -- fitting in -- goods 1 -- a pallet 2 -- receiving -- you may position -- moreover, a foot -- the projection of goods 1 other than 43 may be constituted so that it may fit into the engagement section of a pallet 2.

[0074] It is effective especially when the foot 43 of goods 1 is made to engage with the engagement section of a pallet 2, the goods 1 will be carried under a user if it constitutes so that goods 1 can be positioned, and a user takes over and brings home the old goods which were being used till then. For example, although an old copying machine is carried on a pallet 2 after carrying a copying machine with goods conveyance storage equipment at a user's place and taking this down from goods conveyance storage equipment, the foot of that old copying machine can be made to

be able to engage with the engagement section of a pallet 2 also at this time, and it can position a copying machine to a pallet 2.

[0075] The positioning means shown in drawing 14 and drawing 15 changes from two or more gage pins 44 which protruded on one to the plinth member 3 of a pallet 2, in the pars basilaris ossis occipitalis of the goods 1 laid on the pallet 2, and the example of drawing, the hole 45 formed in the bottom plate 34 of a copying machine fits into a gage pin 44, respectively, and goods 1 are correctly positioned by this to a pallet 2.

[0076] Moreover, two or more screw-thread holes 46 with which the female screw was turned off are formed in the plinth member 3 of the pallet 2 shown in drawing 14 and drawing 15, and, on the other hand, two or more hole 45A is formed in the bottom plate 34 in the pars basilaris ossis occipitalis of the goods 1 carried on the pallet 2, and this example. When goods 1 are carried on a pallet 2, such hole 45A has consistency in the above-mentioned \*\*\*\* hole 46, respectively, inserts a bolt 47 in the hole 45A, and screws the bolt 47 on each \*\*\*\* hole 46. Thus, by binding a bolt 47 tight, goods 1 are fixed to a pallet 2. By removing a bolt 47, immobilization of the goods 1 to a pallet 2 can be canceled. Thus, the \*\*\*\* hole 46 and the bolt 47 constitute the fixed means for demounting goods 1 to a pallet 2 and fixing possible, and when carrying and carrying goods 1 to goods conveyance storage equipment by establishing this fixed means, even if goods conveyance storage equipment shakes or an impact is added to this, they can fix goods 1 to immobilization to a pallet 2.

[0077] In addition, although the copying machine which is an example of goods 1 has the withdrawal sheet paper cassette 48 ahead [ the ] as shown in drawing 1, it extracts the sheet paper cassette 48, as shown in drawing 15, it exposes hole 45A outside, and inserts a bolt 47 in the hole 45A.

[0078] Instead of forming the gage pin 44 shown in drawing 14 and drawing 15, \*\*\*\* into the pallet part, form a hole 46 and the same \*\*\*\* hole, form four screw-thread holes in total, and a bolt is thrust into these. Goods 1 may be positioned to a pallet 2, and you may constitute so that it may fix, but when are done in this way and goods 1 are laid in a pallet 2, many bolts are \*\*\*\*ed, it is necessary to screw on a hole, and the activity will become complicated. On the other hand, like the example shown in drawing 14 and drawing 15, goods 1 are positioned with a locator pin 44, if it constitutes so that goods 1 may be fixed to a pallet 2 with the \*\*\*\* hole 46 and a bolt 47, the number of bolts 47 can be lessened and the bell-and-spigot activity and its removal activity can be simplified. Thus, if both the positioning means for positioning the goods 1 laid in the pallet 2 to this pallet 2 and the fixed means for demounting the goods 1 laid in the pallet 2 to a pallet 2, and fixing possible are formed in goods

conveyance storage equipment, anchoring and the removal activity of the goods 1 to a pallet 2 can be simplified.

[0079] Moreover, it constituted from an example shown in drawing 14 and drawing 15 so that two locator pins 44 might be formed and the stop of the two bolts 47 might be \*\*\*\*\* and carried out, but if the number of bolts 47 is made fewer than the number of locator pins 44, for example, three a locator pin 44 and one bolt 47 are used, anchoring and the removal activity of the goods 1 to a pallet 2 can be simplified further. The number of the parts which fix goods 1 to a pallet 2 with a fixed means is made fewer than the number of the parts which \*\*\*\*\* goods 1 to a pallet 2 with a positioning means.

[0080] Moreover, many screw-thread holes 46 are formed in the pallet 2, and you may enable it to choose the number of the \*\*\*\* holes 46 to be used according to the weight of goods 1. For example, when the weight of goods 1 becomes size, the goods 1 of \*\*\*\* \*\*\*\*\* are firmly fixed to a pallet 2 for a bolt 47 at all the screw-thread holes 46, respectively, when goods 1 are conversely lightweight, a bolt 47 is thrust only into some screw-thread holes 46, and goods 1 are fixed to a pallet 2. that time -- the path of each \*\*\*\* hole 46 -- changing -- weight -- size -- when carrying goods 1, the bolt 47 of the path corresponding to this is thrust into the big screw-thread hole 46 of a path, and you may make it screw in the bolt 47 of the path which balanced at this at the screw-thread hole 46 of a minor diameter in the case of the lightweight conversely goods 1 The activity when being able to fix goods 1 by suitable bonding strength to a pallet 2 by this, and fixing the lightweight goods 1 to a pallet 2, or canceling the immobilization can be simplified.

[0081] In the example shown in drawing 14 and drawing 15 , the gage pin 44 is being soon fixed to the plinth member 3 of a pallet 2. On the other hand, in the example shown in drawing 16 , gage pin 44A of the pair which constitutes the above-mentioned positioning means is fixed to the attachment member 49, and the attachment member 49 \*\*\*\*\* and it is being fixed to the plinth member 3 of a pallet 2 by 50. Each gage pin 44A fits into the hole 45 of goods 1 as well as [ completely ] the gage pin 44 shown in drawing 15 , and it is constituted so that goods 1 may be positioned to a pallet 2.

[0082] As mentioned above, it has gage pin 44A for the above-mentioned positioning means to position the goods 1 laid in the pallet 2 to this pallet 2, and the gage pin 44A is being fixed to the attachment member 49 attached in a pallet 2. Although gage pin 44A and the big stress to the attachment member 49 will occur with this configuration if big external force is applied to goods conveyance storage equipment or goods 1 when carrying and carrying goods 1 to goods conveyance storage equipment since



gage pin 44A is fixed to a pallet 2 through the attachment member 49, big stress is not generated on a pallet 2. For this reason, even if the direction of the attachment member 49 damages or carries out permanent deformation, it can prevent that the pallet itself damages or carries out permanent deformation. Since energy is absorbed according to deformation of the attachment member 49, the permanent deformation of a pallet 2 can be prevented. the pallet itself -- breakage -- or if permanent deformation is carried out, disposal of the whole pallet is carried out, the attachment member 49 is damaged, or permanent deformation is carried out and this is exchanged for a new thing although an economical big loss is produced, the attachment member 49 is small compared with a pallet 2, and since it can manufacture by low cost, economical loss can be suppressed to the minimum.

[0083] In the goods conveyance storage equipment shown in drawing 17 , it had the holddown member to which that fixed means changes from a nut 51, and the bolt 54 screwed on this, and this nut 51 has also fixed to attachment member 49A. Hole 45A which the through tube was formed in the part of attachment member 49A corresponding to the feed hole of a nut 51, and the hole which is not illustrated to the plinth member 3 of a pallet 2, either was formed, and was formed in the goods 1 laid in the pallet 2 has consistency in the above-mentioned hole formed in the pallet 2. In this condition, attachment member 49A is applied to that inferior surface of tongue from the lower part of the plinth member 3 (refer to drawing 20 ), hole 45A of the feed hole of a nut 51, the hole of the above-mentioned pallet 2, and goods 1 is adjusted, and a bolt 54 is inserted in these holes, and this is screwed on a nut 51, and a bolt 54 is bound tight.

[0084] As shown in drawing 18 , the holddown member which changes from a bolt 52 to attachment member 49A may be fixed, the bolt 52 may be inserted in hole 45A of the hole of a pallet 2, and the goods 1 adjusted in this from the lower part of a pallet 2, and you may screw on and bind a nut 53 tight in the bolt 52.

[0085] As mentioned above, in the goods conveyance storage equipment shown in drawing 17 and drawing 18 , it has a holddown member 51, i.e., a nut, or a bolt 52 for the above-mentioned fixed means to fix the goods 1 laid in the pallet 2 to a pallet 2, and the holddown member is being fixed to attachment member 49A attached in a pallet 2. the time of big external force joining goods conveyance storage equipment and goods 1 by this configuration like the case of the example shown in drawing 16 -- not the pallet 2 but attachment member 49A -- permanent deformation -- or it can be made to be able to damage and economic loss can be suppressed by this to the minimum.

[0086] Moreover, as shown in drawing 19 and drawing 20 , when two or more pin 49B for positioning is protruded on attachment member 49A and the attachment member 49 is applied to the inferior surface of tongue of the plinth member 3, the pin 49B can also be constituted so that it may fit into the hole 55 for positioning formed in the plinth member 3. Although not shown in drawing, the hole for positioning which protruded the pin for positioning and was formed in this pin at attachment member 49A may be fitted into a pallet 2 side, and attachment member 49A may be positioned. Thus, the attachment member 49 can be easily positioned correctly to a pallet 2 by establishing the positioning means of attachment member 49A to a pallet 2.

[0087] The above-mentioned configuration can be applied also when a bolt 52 is used instead of a nut 51, as shown in drawing 18 , and it can be applied also to the attachment member 49 further shown in drawing 16 .

[0088] Moreover, if the attachment members 49 and 49A shown in drawing 16 thru/or drawing 20 are attached possible [ justification ] to a pallet 2, the relative position of locator-pin 44A to a pallet 2, and a nut 51 or a bolt 52 is changeable, and the location of Holes 45 and 45A can position various kinds of mutually different goods 1 to a pallet 2, or can be fixed. For example, as shown in drawing 16 , many screw-thread holes 56 are formed in the plinth member 3, the suitable \*\*\*\* hole 56 is chosen according to the location of the hole 45 ( drawing 15 ) of goods 1, it \*\*\*\*\* to the screw-thread hole 56, 50 is bound tight, and the attachment member 49 is fixed to a pallet 2. Attachment member 49A shown in drawing 17 thru/or drawing 20 can choose and attach the fitting location to a pallet 2 similarly.

[0089] Although drawing 21 is the perspective view showing the goods 1 laid on the pallet 2 shown in drawing 14 with a broken line, when carrying goods 1 on a pallet 2, since it comes to the bottom of goods 1, an operator cannot view these but a gage pin 44 and the \*\*\*\* hole 46 usually have a possibility that installation of goods may become difficult.

[0090] Then, if the marker M1 who becomes the criteria of the installation location of goods 1 over a pallet 2 is formed in a pallet 2, it will become possible to perform installation of goods very easily. For example, as shown in drawing 21 , the marker M1 of a continuous line and a broken line who doubled with the size of each goods 1 is formed on the plinth member 3 of a pallet 2, respectively, and when carrying goods 1 on a pallet 2, the edge of the goods 1 is doubled with the marker M1 suitable for the size of the goods 1. Drawing 21 shows the condition of having doubled the edge of goods 1 with the marker of a continuous line. If it does in this way, goods 1 can be easily carried correctly on a pallet 2, and fitting of the gage pin 44 can be

automatically carried out to the hole 45 of goods 1, and hole 45A of the screw-thread hole 46 and goods 1 of a pallet 2 can be adjusted automatically.

[0091] Moreover, instead of forming a marker M1 in a pallet 2 soon, a marker M1 is formed in the marker members 57, such as a plate, a sheet, or a film, this is stuck on a pallet 2, and you may make it fix, as shown in drawing 21 .

[0092] Moreover, when not twisting goods 1 on a help but laying them automatically with a robot on a pallet 2, it can detect by the sensor which is not illustrating the above-mentioned marker M1, and a robot can be operated based on the detection information, and it can also constitute so that goods 1 may be correctly carried on a pallet 2.

[0093] The configuration relevant to the marker M1 who mentioned above is applicable to all the configurations explained previously.

[0094] Here, although the plinth member 3 of a pallet 2 is also fixable to the fixed part of the biped section 4 at immobilization, if the plinth member 3 is fixed possible [ justification ] to the leg 4, it will become possible to lay the goods 1 of various sizes on the plinth member 3.

[0095] Although there are no pallet 2 and change which showed the basic configuration of the pallet 2 which drawing 22 and drawing 23 show the example, and was shown here to drawing 1 and drawing 7 , it is different the following point.

[0096] If pallet parts other than plinth member 3 of the pallet 2 shown in drawing 22 and drawing 23 will be called the pallet body 38, the pallet 2 has the pallet body 38 and the plinth member 3 fixed possible [ adjustment ] to this pallet body 38. In this example, the bolt 41 inserted in movable is inserted in the longitudinal direction of a long hole 39, and the nut 42 is screwed on the through tube formed in four places of the flange 40 of each plinth member 3 by the upper wall 35 of each leg 4 at each of that bolt 41 so that the long hole 39 prolonged in that longitudinal direction may be formed, respectively and may show clearly in drawing 23 . The head 41A is located in the interior of the leg 4, and, as for each bolt 41, the head 41A concerned is formed more greatly than the width of face of a long hole 39.

[0097] If each above-mentioned nut 42 is loosened, it can be made to move in the direction which showed the plinth member 3 to drawing 22 by the arrow head to the pallet body 38 here. If a nut 42 is bound tight after bringing the location which asks for the plinth member 3, for example, the location shown in drawing 22 with the broken line, the plinth member 3 is fixable to the pallet body 38 in the location.

[0098] According to this configuration, according to the size of the goods carried on the goods installation side 5, the location of the plinth member 3 to the pallet body 38

can be adjusted, it is efficient and the goods of various magnitude can be carried on that goods installation side 5.

[0099] Moreover, according to the magnitude of goods 1, the marker M2 who shows the location can also be formed in the leg 4 so that the location of the plinth member 3 can be decided easily and correctly. In the example shown in drawing, it is formed in the leg 4, and when the size of goods 1 is large, the marker M2 of a broken line, an alternate long and short dash line, and a continuous line positions the plinth member 3 according to the location of a continuous line, and fixes this to the leg 4. Conversely, what is necessary is just to position the plinth member 3 according to the location of a broken line, when goods 1 are small. As well as the example shown in drawing 21 also in this case, a marker M2 may be formed in a marker member, and this may be fixed to a pallet 2.

[0100] As mentioned above, the plinth member 3 can be easily positioned to the pallet body 38 by forming the marker M2 who becomes the positioning criteria when fixing the plinth member 3 fixed possible [ justification ] to the pallet body 38 to the pallet body 38 in the pallet body 38. The configuration of the plinth member 3 and marker M2 who illustrated to drawing 22 and drawing 23 and who can be justified is also applicable to any configuration explained previously.

[0101] By the way, although many examples of the positioning means of goods conveyance storage equipment and a fixed means were explained previously, the positioning means collaborates with goods side positioning means, such as the foot 43 prepared in the goods 1 side, and a hole 45, and positions goods 1 to a pallet 2. The business on which similarly a fixed means also collaborates with goods side fixed means, such as hole 45A, and fixes goods 1 to a pallet 2 is made. That is, the goods 1 carried by each goods conveyance storage equipment illustrated previously have at least one side of a goods side positioning means to collaborate with the above-mentioned positioning means and to position the goods 1 to a pallet 2, and the goods side fixed means which collaborates with the above-mentioned fixed means and fixes the goods 1 to a pallet 2.

[0102] Here, in the goods 1 illustrated to drawing 13 , a goods side positioning means consists of the foot 43 of the goods lower part which can engage with the engagement section (it sets to drawing 13 and is a through tube 33) which constitutes the positioning means formed in the pallet 2 as mentioned above. If such a foot 43 is formed in industrial products, such as a copying machine, from the first and this foot 43 is used as a goods side positioning means, it does not need to establish the goods side positioning means of the dedication for positioning the goods to a pallet 2, and

can suppress a cost rise of a product.

[0103] the foot in at least 2 models of industrial products which are mutually different when goods 1 are electric products, such as a copying machine, a printer, facsimile, television, a washing machine, and a refrigerator, and other industrial products in that case which corresponds mutually -- if spacing of a between is set up almost respectively equally, the advantage which can position and carry each of the different type of industrial product on the pallet 2 of the same gestalt will be acquired.

[0104] Drawing 24 and drawing 25 are drawings which explain this configuration concretely. Supposing that the goods 1 which consist of the copying machine shown in drawing 24 are more large-sized than the copying machine shown in drawing 25, the model of both copying machines shall be different. Every four feet 43 are formed in the bottom plate 34 of these copying machines, respectively. the foot which adjoins each other mutually [ the large-sized copying machine shown in drawing 24 ] in that case -- the foot of the small copying machine which showed each spacing L and W of a between to drawing 25 which adjoins each other mutually -- it is equal with each spacing L1 and W1 of a between, respectively ( $L=L1$ ,  $W=W1$ ). thus, the foot in the copying machine of a mutually different model which corresponds mutually -- the spacing L, L1, and W of a between and W1 are set up equally, respectively. For this reason, spacing between through tubes 33 can position and lay any copying machine in the fixed pallet 2, and this can be carried by the stable state. Whenever models differ, it is not necessary to prepare the pallet which set up spacing between through tubes 33 according to the model, the manufacturing cost of a pallet can be reduced, and it also becomes possible to also lower the cost of industrial products, such as a copying machine, moreover.

[0105] It is constituted so that the goods 1 with which hole 45A was formed in the bottom plate within the body of a copying machine like the copying machine shown also in the copying machine shown in drawing 26 at drawing 15, and the bolt 47 was formed in the hole 45, and it was formed in the pallet 2 in through and its bolt and which \*\*\*\*, stuff a hole (not shown in drawing 26), and consist of a copying machine may be fixed to a pallet 2. Hole 45A constitutes an example of a goods side fixed means. Since hole 45A is formed in the near side of a copying machine in the example shown in drawing 15 in that case, by drawing out a sheet paper cassette 48 ( drawing 1 ) as mentioned above, a hand can be inserted here from the near side of a copying machine, a bolt 47 can be easily inserted in hole 45A, and the activity which this is \*\*\*\*\* and is thrust into a hole 46 can be done. However, since hole 45A shown in drawing 26 is located in the back side within the body of a copying machine, it inserts

a hand from a copying machine near side, inserts a bolt 47 in the hole 45A, \*\*\*\*\* this, and cannot screw it on a hole. Although posterior part sheathing covering 65 \*\*\*\*\* of a copying machine and a bolt 47 can be screwed in, whenever it carries a copying machine, it is very troublesome to remove the posterior part sheathing covering 65.

[0106] So, in the example shown in drawing 26 and drawing 27 , opening 66 is formed in the posterior part sheathing covering 65 of a copying machine, covering 67 is attached in this opening 66 possible [ closing motion ], and hole 45A which constitutes a goods side fixed means inside that covering 67 is arranged. Usually, covering 65 occupies a closed position, as shown in drawing 26 , and opening 66 is closed. When a copying machine is fixed to a pallet 2, the covering 67 is demounted from the body of a copying machine, as shown in drawing 27 , and opening 66 is opened. Since hole 45A is located near the opening 66 if it does in this way, a bolt 47 can be thrust into the hole 45A, and through and this can be thrust into the screw-thread hole of a pallet 2. After finishing this activity, covering 67 is closed again and opening 66 is closed. A bolt 47 can be demounted according to the same activity. Such a configuration can be applied when goods consist of things other than a copying machine.

[0107] As mentioned above, in the example shown in drawing 28 and drawing 29 , hole 45A which is an example of a goods side fixed means is in the body of goods, and is arranged inside the covering 67 attached in the opening 66 of this body of goods possible [ closing motion ]. By this configuration, a hand can be easily brought close to the part of hole 45A by opening covering 65.

[0108] By the way, although the holes 45 and 45A shown in drawing 15 , drawing 17 , drawing 18 , drawing 26 , and drawing 27 constitute an example of a goods side positioning means and a goods side fixed means, respectively, goods may be chiefly positioned to a pallet 2, or they may form these holes 45 and 45A in goods 1 as a hole for fixing, so that the place mentioned above may also show. On the other hand, if the hole used also for applications other than immobilization of the goods 1 to a pallet 2 is used as such holes 45 and 45A, the manufacturing cost of the goods can be reduced.

[0109] Drawing 28 and drawing 29 are the explanatory views showing the situation when manufacturing a copying machine, the fixture plate 59 is carried on the conveyor 58 of the production line, and two pins 60 for positioning protrude on the fixture plate 59. And the bottom plate 34 of a copying machine is carried on this fixture plate 59, the pin 60 of the fixture plate 59 fits into the tooling holes 68 formed in the bottom plate 34 at this time, and a bottom plate 34 is positioned to the fixture plate 59. Other components of a copying machine are attached to this bottom plate 34.

[0110] As mentioned above, the tooling holes 68 used at the time of manufacture of a copying machine are used as the hole 45 for positioning shown in drawing 15 , drawing 17 , drawing 18 , drawing 26 , drawing 27 , etc., or hole 45 for immobilization A. If it does in this way, it is not necessary to form the hole of dedication for positioning of the goods 1 to a pallet 2, or immobilization in goods 1, and the manufacturing cost can be reduced.

[0111] Moreover, drawing 30 and drawing 31 indicate the medium tray equipment 61 used for that lower part, connecting to be the goods 1 which consist of a copying machine, the \*\*\*\* hole 62 is formed in this medium tray equipment 61, and the mounting hole 63 is formed in the direction of a copying machine. When using this copying machine and medium tray equipment 61 under a user, while these are piled up up and down as shown in drawing 30 , and \*\*\*\*ing to a mounting hole 63 and inserting 64, this screw thread 64 is \*\*\*\*ed, a hole 62 is stuffed, and a copying machine and medium tray equipment 61 are combined.

[0112] When positioning the goods 1 which consist of the copying machine like \*\*\*\* to a pallet 2, the above-mentioned mounting hole 63 is used as a hole 45 shown in drawing 15 , and fitting of the gage pin 44 is made to carry out here. Moreover, when goods 1 are fixed to a pallet 2 from the copying machine shown in drawing 30 , the mounting hole 63 is used as hole 45A shown in drawing 15 , and a bolt 47 is inserted in here, and the bolt 47 is thrust into the screw-thread hole 46 of a pallet 2, and it fixes. If it uses as a bolt 47 for \*\*\*\*ing and fixing a copying machine to a pallet 2 for 64 shown in drawing 31 in that case, the use effectiveness of the screw thread can be raised. Moreover, what is necessary is just to form greatly the path of the mounting hole 63 in which \*\*\*\* 64 and this are inserted, and the \*\*\*\* hole 62 so that the fixed reinforcement for which it is needed at immobilization of the pallet 2 to goods 1 may be obtained when there is the need of raising the fixed reinforcement when fixing to a pallet 2 the goods 1 which consist of a copying machine.

[0113] As mentioned above, if a goods side positioning means consists of the hole 63 used also for applications other than positioning of the goods to a pallet 2 and a goods side fixed means similarly consists of the hole 63 used also for applications other than immobilization of the goods to a pallet 2, the advantage which can suppress the rise of the manufacturing cost of goods will be acquired. It is applicable to the configuration relevant to the covering 67 to which this configuration was also shown in each configuration especially above-mentioned drawing 26 , and above-mentioned drawing 27 .

[0114] As mentioned above, although many examples of an operation gestalt of this

invention were explained, goods conveyance storage equipment or the goods carried by this can also be constituted, combining the configuration of each of that example suitably. Moreover, this invention can apply substantially components, such as various goods other than the goods illustrated previously, for example, an automobile, and an engine of those, furniture, a building material, etc. to the goods conveyance storage equipment of anythings.

[0115]

[Effect of the Invention] According to invention according to claim 1, since spacing between each struts can be adjusted, any goods of size can be carried efficiently or this can be kept. And since the goods put on the pallet can be positioned to the pallet, goods can be carried in the condition of having been stabilized or this can be kept.

[0116] According to invention according to claim 2, since spacing between each struts can be adjusted, any goods of size can be carried efficiently or this can be kept. And since the goods put on the pallet are fixable to the pallet, goods can be carried in the condition of having been stabilized further, or this can be kept.

[0117] According to invention according to claim 3, since spacing between each struts can be adjusted, any goods of size can be carried efficiently or this can be kept. And since it is fixable while positioning the goods put on the pallet to the pallet, goods can be carried in the condition of having been stabilized further, or this can be kept.

Moreover, the activity which fixes goods to a pallet can be simplified.

[0118] According to invention given in claims 4 and 5, when big external force acts on goods conveyance storage equipment or goods, breakage and permanent deformation of the pallet itself can be prevented and the economical loss can be suppressed to the minimum.

[0119] According to invention according to claim 6, various goods can be positioned on the pallet of the same gestalt, or it can fix.

[0120] According to invention according to claim 7, goods can be easily laid in a right location to a pallet.

[0121] Since the plinth member which lays goods can be justified to a pallet body according to invention according to claim 8, the goods of various sizes can be laid in the pallet body of the same gestalt.

[0122] According to invention according to claim 9, a plinth member can be easily attached correctly to a pallet body.

[0123] According to invention according to claim 10 to 13, an easy configuration can constitute the goods conveyance storage equipment which can adjust spacing between stanchions.



[0124] Especially, according to invention according to claim 11 or 13, the adjustment degree of freedom of spacing between stanchions can be raised.

[0125] According to invention according to claim 14, goods can be positioned easily and certainly to a pallet, or it can fix.

[0126] According to invention according to claim 15, since the foot of goods is making the goods side positioning means serve a double purpose, it is avoidable that the structure of goods is complicated.

[0127] According to invention according to claim 16, the industrial product with which models differ can be carried in a common pallet, and can be carried.

[0128] According to invention according to claim 17, a hand can be easily lengthened for a goods side fixed means, and immobilization of the goods to a pallet can be performed.

[0129] According to invention given in claims 18 and 19, it is avoidable that the structure of goods is complicated.

---

## DESCRIPTION OF DRAWINGS

---

[Brief Description of the Drawings]

[Drawing 1] It is the perspective view showing an example of goods conveyance storage equipment.

[Drawing 2] It is the perspective view showing the situation when assembling the goods conveyance storage equipment shown in drawing 1 , and accumulating this up and down.

[Drawing 3] It is the expansion perspective view of the connection member connected with the 1st joint shown in drawing 1 , and this.

[Drawing 4] It is the decomposition perspective view having separated and shown the stanchion from the 2nd joint shown in drawing 1 .

[Drawing 5] It is the perspective view showing the condition of having folded up the stanchion unit shown in drawing 1 .

[Drawing 6] It is the perspective view showing signs that accumulated the pallet shown in drawing 1 up and down, and it was stored.

[Drawing 7] Drawing 1 is the perspective view showing the example of an operation gestalt of different goods conveyance storage equipment.

[Drawing 8] It is a perspective view when accumulating a goods conveyance storage

equipment top up and down.

[Drawing 9] It is the perspective view showing the condition of having folded up the stanchion unit shown in drawing 7 .

[Drawing 10] It is the perspective view showing the situation when folding up a stanchion unit.

[Drawing 11] It is the perspective view showing the folded-up stanchion unit.

[Drawing 12] It is the perspective view showing the situation when detaching and attaching a stanchion unit on a pallet.

[Drawing 13] It is the perspective view showing the situation when carrying out fitting of the foot of a copying machine to the through tube of a pallet.

[Drawing 14] It is the perspective view of a pallet which \*\*\*\*s with a gage pin and has a hole.

[Drawing 15] It is the perspective view showing the situation when attaching the goods which consist of a copying machine on the pallet shown in drawing 14 .

[Drawing 16] It is the perspective view showing the example which fixed the gage pin to the attachment member.

[Drawing 17] It is the perspective view showing the example which fixed the nut to the attachment member.

[Drawing 18] It is the perspective view showing the example which fixed the bolt to the attachment member.

[Drawing 19] It is the perspective view showing the example which prepared the pin for positioning in the attachment member.

[Drawing 20] It is the perspective view showing the condition when applying the attachment member shown in drawing 19 to a pallet.

[Drawing 21] It is drawing which showed the situation when attaching a copying machine to the pallet shown in drawing 14 , and expressed the \*\*\*\*\* with the broken line.

[Drawing 22] It is the perspective view showing the example which fixes a plinth member to a pallet body possible [ justification ].

[Drawing 23] It is the partial enlarged drawing of drawing 22 .

[Drawing 24] It is the perspective view showing the relation between a large-sized copying machine and a pallet.

[Drawing 25] It is the perspective view showing the relation between a small copying machine and a pallet.

[Drawing 26] It is the perspective view showing the example which prepared covering in the back side of a copying machine.

[Drawing 27] It is the perspective view showing the situation when opening covering shown in drawing 26 .

[Drawing 28] It is the perspective view showing the bottom plate of the fixture plate on a conveyor, and a copying machine.

[Drawing 29] It is the perspective view showing the condition when setting a bottom plate on a fixture plate.

[Drawing 30] It is the perspective view showing a copying machine and medium tray equipment.

[Drawing 31] It is the perspective view showing the situation when piling up the copying machine and medium tray equipment which were shown in drawing 30 up and down.

#### [Description of Notations]

1 Goods

2 Pallet

3 Plinth Member

5 Goods Installation Side

6 Stanchion

6A Stanchion

6B Stanchion

6C Stanchion

6D Stanchion

8 1st Joint

8A The 1st joint

8B The 1st joint

8C The 1st joint

8D The 1st joint

9 2nd Joint

9A The 2nd joint

9B The 2nd joint

9C The 2nd joint

9D The 2nd joint

14 1st Connection Member

14A The 1st connection member

14B The 1st connection member

14C The 1st connection member

14D The 1st connection member  
15 2nd Connection Member  
15A The 2nd connection member  
15B The 2nd connection member  
15C The 2nd connection member  
15D The 2nd connection member  
26 3rd Joint  
26A The 3rd joint  
26B The 3rd joint  
26C The 3rd joint  
26D The 3rd joint  
30 Goods Conveyance Storage Equipment  
30A Goods conveyance storage equipment  
38 Pallet Body  
43 Foot  
44A Gage pin  
45 Hole  
45A Hole  
49 Attachment Member  
49A Attachment member  
63 Hole  
66 Opening  
67 Covering  
68 Hole  
L Spacing  
L1 Spacing  
M1 Marker  
M2 Marker  
W Spacing  
W1 Spacing

---

[Translation done.]